What is claimed is:

1. A therapeutic composition, comprising:

a. a dendritic cell;

b. a yeast vehicle; and,

c. at least one antigen;

wherein said dendritic cell has been loaded intracellularly with said yeast vehicle and said at least one antigen.

2. The therapeutic composition of Claim 1, wherein a yeast cell or yeast spheroplast used to prepare said yeast vehicle was transformed with a heterologous nucleic acid molecule encoding said antigen such that said antigen is expressed by said yeast cell.

3. The therapeutic composition of Claim 2, wherein said dendritic cell has been additionally loaded with free antigen.

4. The therapeutic composition of Claim 1, wherein, prior to loading said yeast vehicle into said dendritic cell, said yeast vehicle was loaded intracellularly with said antigen.

5. The therapeutic composition of Claim 4, wherein said dendritic cell has been additionally loaded with free antigen.

6. The therapeutic composition of Claim 1, wherein said antigen was covalently or non-covalently attached to said yeast vehicle prior to loading said yeast vehicle into said dendritic cell.

7. The therapeutic composition of Claim 6, wherein said dendritic cell has been additionally loaded with free antigen.

8. The therapeutic composition of Claim 1, wherein said yeast vehicle and said antigen were associated by mixing prior to or simultaneously with loading into said dendritic cell.

9. The therapeutic composition of Claim 1, wherein said antigen is selected from the group consisting of viral antigens, mammalian cell surface molecules, bacterial antigens, fungal antigens, protozoan antigens, helminth antigens, ectoparasite antigens, and cancer antigens.

10. The therapeutic composition of Claim 1, wherein said antigen is selected from the group consisting of: HIV-1 gag, HIV-1 env, HIV-1 pol, HIV-1 tat, HIV-1 nef, HbsAG, HbcAg, hepatitis c core antigen, HPV E6 and E7, HSV glycoprotein D, and *Bacillus anthracis* protective antigen.

11. The therapeutic composition of Claim 1, wherein said composition comprises multiple antigens.

12. The therapeutic composition of Claim 1, wherein said composition further comprises at least one biological response modifier.

13. The therapeutic composition of Claim 1, wherein said yeast is a nonpathogenic yeast.

14. The therapeutic composition of Claim 1, wherein said yeast is of a genus selected from the group consisting of *Saccharomyces*, *Candida*, *Cryptococcus*, *Hansenula*, *Kluyveromyces*, *Pichia*, *Rhodotorula*, *Schizosaccharomyces* and *Yarrowia*.

15. The therapeutic composition of Claim 1, wherein said yeast vehicle is selected from the group consisting of a whole yeast, a yeast spheroplast, a yeast cytoplast, a yeast ghost, and a subcellular yeast particle.

16. A method to produce a therapeutic composition comprising a dendritic cell loaded with a yeast vehicle and an antigen, said method comprising:

a. forming a yeast vehicle-antigen complex; and,

b. loading said dendritic cell with said yeast vehicle-antigen complex.

17. The method of Claim 16, wherein step (a) is performed by transfecting a yeast vehicle with a nucleic acid molecule encoding said antigen, such that said antigen is expressed by said yeast vehicle.

18. The method of Claim 16, wherein step (a) is performed by loading a yeast vehicle with said antigen by a method selected from the group consisting of: diffusion, active transport, liposome fusion, electroporation, phagocytosis, freeze-thaw cycles and bath sonication.

19. The method of Claim 16, wherein step (a) is performed by mixing together said antigen and said yeast vehicle, prior to or simultaneously with performing step (b).

20. The method of Claim 16, wherein said step (a) is performed by physically attaching said antigen to a yeast vehicle.

21. The method of Claim 20, wherein said attaching step is performed by a method selected from the group consisting of: crosslinking said antigen to said yeast vehicle and binding said antigen to a yeast cell wall protein on said yeast vehicle.

22. The method of Claim 16, wherein step (b) of loading is accomplished by a method selected from the group consisting of: diffusion, active transport, liposome fusion, electroporation, phagocytosis, and bath sonication.

23. A method to elicit an antigen-specific humoral immune response and an antigen-specific cell-mediated immune response in a mammal, said method comprising administering to said mammal a therapeutic composition comprising:

a. a dendritic cell;

b. a yeast vehicle; and,

c. at least one antigen;

wherein said dendritic cell has been loaded intracellularly with said yeast vehicle and said at least one antigen.

24. The method of Claim 23, wherein said therapeutic composition is administered by a route selected from the group consisting of: intravenous, intraperitoneal, subcutaneous, intradermal, intranodal, intramuscular, transdermal, inhaled, intranasal, oral, intraocular, intraarticular, intracranial, and intraspinal.

25. The method of Claim 23, wherein said therapeutic composition is administered with a pharmaceutically acceptable excipient.

26. A method to elicit an antigen-specific humoral immune response and an antigen-specific cell-mediated immune response in a mammal, said method comprising administering to said mammal a therapeutic composition comprising:

a. a yeast vehicle; and,

b. at least one antigen;

wherein said yeast vehicle is not complexed with said antigen.

27. The method of Claim 26, wherein said therapeutic composition is administered by a route selected from the group consisting of: intravenous, intraperitoneal, subcutaneous, intradermal, intranodal, intramuscular, transdermal, inhaled, intranasal, oral, intraocular, intraarticular, intracranial, and intraspinal.

28. The method of Claim 26, wherein said therapeutic composition is administered with a pharmaceutically acceptable excipient.